



**6560-50-P**

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 52**

**[EPA-R04-OAR-2009-0782; FRL-9691-8]**

## **Approval and Promulgation of Implementation Plans; State of Alabama; Regional Haze State Implementation Plan**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** EPA is finalizing a limited approval of a revision to the Alabama State Implementation Plan (SIP) submitted by the State of Alabama through the Alabama Department of Environmental Management (ADEM) on July 15, 2008. Alabama's July 15, 2008, SIP revision addresses regional haze for the first implementation period. Specifically, this SIP revision addresses the requirements of the Clean Air Act (CAA or Act) and EPA's rules that require states to prevent any future and remedy any existing anthropogenic impairment of visibility in mandatory Class I areas (national parks and wilderness areas) caused by emissions of air pollutants from numerous sources located over a wide geographic area (also referred to as the "regional haze program"). States are required to assure reasonable progress toward the national goal of achieving natural visibility conditions in Class I areas. EPA is finalizing a limited approval of Alabama's July 15, 2008, SIP revision to implement the regional haze requirements for Alabama on the basis that this SIP revision, as a whole, strengthens the Alabama SIP. Additionally, EPA is rescinding the federal regulations previously approved into the Alabama SIP on November 24, 1987, and approving the provisions in Alabama's July 15, 2008, SIP

submittal to meet the long-term strategy (LTS) requirements for reasonably attributable visibility impairment (RAVI). In a separate action published on June 7, 2012, EPA finalized a limited disapproval of this same SIP revision because of the deficiencies in the State's regional haze SIP revision arising from the remand by the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) to EPA of the Clean Air Interstate Rule (CAIR).

**EFFECTIVE DATE:** This rule will be effective [insert 30 days from the date of publication in the Federal Register], except for the amendment to §52.61, which is effective on August 7, 2012.

**ADDRESSES:** EPA has established a docket for this action under Docket Identification No. EPA-R04-OAR-2009-0782. All documents in the docket are listed on the [www.regulations.gov](http://www.regulations.gov) web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section for further information. The Regional

Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Michele Notarianni, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Michele Notarianni can be reached at telephone number (404) 562-9031 and by electronic mail at [notarianni.michele@epa.gov](mailto:notarianni.michele@epa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Table of Contents**

- I. What is the Background for This Final Action?**
- II. What is EPA's Response to Comments Received on This Action?**
- III. What is the Effect of This Final Action?**
- IV. Final Action**
- V. Statutory and Executive Order Reviews**

### **I. What is the Background for This Final Action?**

Regional haze is visibility impairment that is produced by a multitude of sources and activities which are located across a broad geographic area and emit fine particles (e.g., sulfates, nitrates, organic carbon, elemental carbon, and soil dust), and their precursors (e.g., sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and in some cases, ammonia and volatile organic

compounds. Fine particle precursors react in the atmosphere to form fine particulate matter (PM<sub>2.5</sub>) which impairs visibility by scattering and absorbing light. Visibility impairment reduces the clarity, color, and visible distance that one can see. PM<sub>2.5</sub> can also cause serious health effects and mortality in humans and contributes to environmental effects such as acid deposition and eutrophication.

In section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation's national parks and wilderness areas. This section of the CAA establishes as a national goal the "prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I areas which impairment results from manmade air pollution." On December 2, 1980, EPA promulgated regulations to address visibility impairment in Class I areas that is "reasonably attributable" to a single source or small group of sources, i.e., "reasonably attributable visibility impairment." *See* 45 FR 80084. These regulations represented the first phase in addressing visibility impairment. EPA deferred action on regional haze that emanates from a variety of sources until monitoring, modeling, and scientific knowledge about the relationships between pollutants and visibility impairment were improved.

Congress added section 169B to the CAA in 1990 to address regional haze issues. EPA promulgated a rule to address regional haze on July 1, 1999 (64 FR 35713), the Regional Haze Rule (RHR). The RHR revised the existing visibility regulations to integrate into the regulation provisions addressing regional haze impairment and established a comprehensive visibility protection program for Class I areas. The requirements for regional haze, found at 40 CFR

51.308 and 51.309, are included in EPA's visibility protection regulations at 40 CFR 51.300-309. The requirement to submit a regional haze SIP applies to all 50 states, the District of Columbia, and the Virgin Islands. 40 CFR 51.308(b) requires states to submit the first implementation plan addressing regional haze visibility impairment no later than December 17, 2007.

On July 15, 2008, ADEM submitted a revision to Alabama's SIP to address regional haze in the State's and other states' Class I areas. On February 28, 2012, EPA published an action proposing a limited approval of Alabama's July 15, 2008, SIP revision to address the first implementation period for regional haze.<sup>1</sup> *See* 77 FR 11937. EPA proposed a limited approval of Alabama's July 15, 2008, SIP revision to implement the regional haze requirements for Alabama on the basis that this revision, as a whole, strengthens the Alabama SIP. *See* section II of this rulemaking for a summary of the comments received on the proposed actions and EPA's responses to these comments. Detailed background information and EPA's rationale for the proposed action is provided in EPA's February 28, 2012, proposed rulemaking. *See* 77 FR 11937.

Following the remand of CAIR, EPA issued a new rule in 2011 to address the interstate transport of NO<sub>x</sub> and SO<sub>2</sub> in the eastern United States. *See* 76 FR 48208 (August 8, 2011) ("the Transport Rule," also known as the Cross-State Air Pollution Rule (CSAPR)). On December 30, 2011, EPA proposed to find that the trading programs in the Transport Rule would achieve greater reasonable progress towards the national goal of achieving natural visibility conditions

---

<sup>1</sup> In a separate action, published on June 7, 2012 (77 FR 33642), EPA finalized a limited disapproval of the Alabama regional haze SIP because of deficiencies in the State's regional haze SIP submittal arising from the State's reliance on CAIR to meet certain regional haze requirements. This final limited disapproval triggers a 24-month clock by which a Federal Implementation Plan (FIP) or EPA-approved SIP must be in place to address the deficiencies.

than would best available retrofit technology (BART) in the states in which the Transport Rule applies (including Alabama). *See* 76 FR 82219. Based on this proposed finding, EPA also proposed to revise the RHR to allow states to substitute participation in the trading programs under the Transport Rule for source-specific BART. EPA finalized this finding and RHR revision on June 7, 2012 (77 FR 33642).

Also on December 30, 2011, the D.C. Circuit stayed the Transport Rule (including the provisions that would have sunset CAIR and the CAIR FIPs) and instructed the EPA to continue to administer CAIR pending the outcome of the court's decision on the petitions for review challenging the Transport Rule. *EME Homer City v. EPA*, No. 11-1302.

## **II. What is EPA's Response to Comments Received on This Action?**

EPA received two sets of comments on the February 28, 2012, rulemaking proposing a limited approval of Alabama's July 15, 2008, regional haze SIP revision. Specifically, the comments were received from the Sierra Club and ADEM. Full sets of the comments provided by all of the aforementioned entities (hereinafter referred to as "the Commenter") are provided in the docket for today's final action. A summary of the comments and EPA's responses are provided below.

**Comment 1:** The Commenter does not believe that ADEM can rely on CAIR or the Transport Rule to exempt the eight power plants with BART-eligible electric generating units (EGUs) from

an SO<sub>2</sub> and NO<sub>x</sub> BART analysis. The Commenter enclosed letters that it submitted to EPA on February 28, 2012, with its comments on the Agency's proposed December 30, 2011, rulemaking to find that the Transport Rule is "better than BART" and to use the Transport Rule as an alternative to BART for Alabama and other states subject to the Transport Rule. *See* 76 FR 82219. The Commenter incorporates the comments in this letter by reference and repeats a subset of those comments, including the following: the Transport Rule cannot serve as a BART alternative for the regional haze SIP process in Alabama; EPA has not demonstrated that the Transport Rule assures greater reasonable progress than source-specific BART; EPA failed to account for the geographical and temporal uncertainties in emissions reductions inherent in a cap-and-trade program such as the Transport Rule; EPA underestimated the visibility improvements from BART using "presumptive BART, rather than actual BART;" "case specific BART determinations for SO<sub>2</sub> emissions from EGUs in Alabama would almost certainly ensure greater progress than would be achieved by CSAPR;" and EPA has not accounted for the differences in averaging time under BART, the Transport Rule, and in measuring visibility impacts.

**Response 1:** These comments are beyond the scope of this rulemaking. In today's rule, EPA is finalizing a limited approval of Alabama's regional haze SIP. EPA did not propose to find that participation in the Transport Rule is an alternative to BART in this action nor did EPA reopen discussions on the CAIR provisions as they relate to BART.<sup>2</sup> As noted above, EPA proposed to

---

<sup>2</sup> In a final action published on July 6, 2005, EPA addressed similar comments related to CAIR and determined that CAIR makes greater reasonable progress than BART for certain EGUs and pollutants (70 FR 39138). EPA did not reopen comment on that issue through this rulemaking.

find that the Transport Rule is “Better than BART” and to use the Transport Rule as an alternative to BART for Alabama in a separate action on December 30, 2011, and the Commenter is merely reiterating and incorporating its comments on that separate action. EPA addressed these comments concerning the Transport Rule as a BART alternative in a final action that was published on June 7, 2012, and has determined that they do not affect the Agency’s ability to finalize a limited approval of Alabama’s regional haze SIP. EPA’s responses to these comments can be found in Docket ID No. EPA-HQ-OAR-2011-0729 at [www.regulations.gov](http://www.regulations.gov).

**Comment 2:** The Commenter asserts that because “the BART component of Alabama’s RH SIP is an essential element to the state’s LTS for achieving its RPGs, Alabama’s treatment of CAIR (and now EPA’s proposed substitution of CSAPR for CAIR) as an acceptable BART-alternative must be addressed in this present comment process. Separating the BART analysis from the remaining portion of the RH SIP would result in an inadequate SIP.” The Commenter supports its position by repeating statements made in its February 28, 2012, comments on the Agency’s proposed December 30, 2011, rulemaking to find that the Transport Rule is “Better than BART” and to use the Transport Rule as an alternative to BART for Alabama and other states subject to the Transport Rule. For example, the Commenter states that “EPA cannot exempt sources from the RHR’s BART requirements without full consideration of how that exemption would affect the overarching reasonable progress mandate.”

**Response 2:** As discussed in the response to Comment 1, today's action does not address reliance on CAIR or CSAPR to satisfy BART requirements. Comments related to the approvability of CAIR or CSAPR for the Alabama regional haze SIP are therefore beyond the scope of this rulemaking and were addressed by EPA in a separate action published on June 7, 2012 (77 FR 33642). EPA addressed the Commenter's repeated statements regarding the interrelatedness of BART, the LTS, and RPGs in that final rulemaking action and those responses support this limited approval action.<sup>3</sup>

EPA believes the Commenter overstates the overarching nature of the changes due to CAIR or CSAPR. The reliance on CAIR in the Alabama submittal was consistent with EPA policy at the time the submittal was prepared. CSAPR is a replacement for CAIR, addressing the same regional EGU emissions, with many similar regulatory attributes. The need to address changes to the LTS resulting from the replacement of CAIR with CSAPR was acknowledged in the proposal, and as stated in the proposal, EPA believes that the five-year progress report is the appropriate time to address any changes to the RPG demonstration and, if necessary, the LTS. EPA expects that this demonstration will address the impacts on the RPG due to the replacement of CAIR with CSAPR as well as other adjustments to the projected 2018 emissions due to updated information on the emissions for other sources and source categories. If this assessment determines an adjustment to the regional haze plan is necessary, EPA regulations require a SIP

---

<sup>3</sup> See EPA, Response to Comments Document, Regional Haze: Revisions to Provisions Governing Alternatives to Source-Specific Best Available Retrofit Technology (BART) Determinations, Limited SIP Disapprovals, and Federal Implementation Plans (76 FR 82219; December 30, 2011), Docket Number EPA-HQ-OAR-2011-0729 (May 30, 2012), pages 49-51 (noting that EPA "disagree[s] with comments that we cannot evaluate the BART requirements in isolation from the reasonable progress requirements. We have on several occasions undertaken evaluations of a state's BART determination or promulgated a FIP separately from our evaluation of whether the SIP as a whole will ensure reasonable progress.").

revision within a year of the five-year progress report.

**Comment 3:** The Commenter believes that Alabama should have considered the cumulative impacts of the particulate matter (PM) emissions from the State's PM BART-eligible EGUs when performing BART exemption modeling and that the State should not have modeled these sources in isolation of one another or without regard to PM emissions from sources in other states which impact the Sipsey Wilderness Area (Sipsey) or any Class I area. The Commenter also believes that ADEM should have considered both filterable and condensable PM when conducting this modeling.

**Response 3:** As discussed in the proposal, (*see* section IV.C.6.B.2, February 28, 2012, 77 FR 11950-11951), Alabama adequately justified its contribution threshold of 0.5 deciview. While states have the discretion to set an appropriate contribution threshold considering the number of emissions sources affecting the Class I area at issue and the magnitude of the individual sources' impacts, the states' analysis must be consistent with the CAA, the RHR, and EPA's *Guidelines for BART Determinations Under the Regional Haze Rule* at Appendix Y to 40 CFR part 51 (BART Guidelines). Consistent with the regulations and EPA's guidance, "the contribution threshold should be used to determine whether an individual source is reasonably anticipated to contribute to visibility impairment. You should not aggregate the visibility effects of multiple sources and compare their collective effects against your contribution threshold because this

would inappropriately create a ‘contribution to contribution’ test.” *See also* 70 FR 39121.

Alabama’s analysis in the regional haze SIP revision was consistent with EPA’s regulations and guidance on the issue of cumulative analyses.

It is unclear what condensable PM emissions the Commenter believes that the State should have included in its visibility modeling. Each of the units evaluated for BART in Alabama’s regional haze SIP followed the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) modeling protocol and considered the contribution of total PM<sub>10</sub> and PM<sub>2.5</sub> (as a subset of the total PM<sub>10</sub>) as well as condensable PM (primarily sulfuric acid mist) (see Appendix H.9 of Alabama’s regional haze SIP). Regarding modeling in Alabama’s submittal that uses PM only for its BART-eligible EGUs, EPA previously determined that this approach is appropriate for EGUs where the State proposed to rely on CAIR to satisfy the BART requirements for SO<sub>2</sub> and NO<sub>x</sub>.<sup>4</sup>

**Comment 4:** The Commenter disagrees with ADEM’s BART analyses for the five BART eligible-units at the Solutia, Inc., facility in Decatur, Alabama, as well as its analyses for the seven BART-eligible units at International Paper’s Courtland, Alabama, facility (International Paper). In particular, the Commenter states that Alabama’s BART analyses failed to consider all available retrofit technologies. The Commenter identified combustion controls that “should be considered for NO<sub>x</sub> BART” including: flue gas recirculation, overfire air, low NO<sub>x</sub> burners, and ultra low NO<sub>x</sub> burners; as well as post-combustion controls such as: selective catalytic reduction

---

<sup>4</sup> *Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations*, EPA Memorandum from Joseph Paisie, Group Leader, Geographic Strategies Group, OAQPS, to Kay Prince, Branch Chief, EPA Region 4, July 19, 2006, located at: [http://www.epa.gov/visibility/pdfs/memo\\_2006\\_07\\_19.pdf](http://www.epa.gov/visibility/pdfs/memo_2006_07_19.pdf).

(SCR) and selective non-catalytic reduction (SNCR). Regarding SO<sub>2</sub> BART, the Commenter believes that ADEM should have considered additional controls such as: “a number of post-combustion flue gas desulfurization options” (e.g., dry sorbent injection, spray dryer absorbers, wet scrubbers, circulating dry scrubbers) as well as fuel switching (e.g., switching from coal to oil). For PM BART, the Commenter identifies the following controls for consideration: changing the operation of any air pre-heaters; installing fabric filters or baghouses; installing or upgrading electrostatic precipitators (ESPs); switching to wet ESPs; upgrading electrodes (e.g., possibly changing from wire to rigid discharge electrode); switching to “a lower sulfur coal or a different sort or blend of fuel;” addition of a trona injection system; installation of scrubbers; and upgrading any existing scrubbers. The Commenter believes that Alabama should have considered all of the above-mentioned control options when conducting its BART analyses, regardless of their comparative costs.

The Commenter also contends that ADEM: ignored less costly yet equally efficient controls; should have fully considered options for improving existing controls instead of just those involving a complete replacement of control devices (e.g., ESP upgrade options);” should have evaluated different combinations of controls in making its BART determinations; and must ensure that current controls are actually operating at BART levels where ADEM concluded that those controls are BART. Finally, the Commenter believes that it is not possible to determine if the proper costing methodology was followed by these sources “without supporting data in the docket.”

**Response 4:** As stated in EPA’s BART Guidelines, available retrofit control options are those air pollution control technologies with a practical potential for application to the emissions unit and the regulated pollutant under evaluation. In identifying “all” options, a state must identify the most stringent option and a reasonable set of options for analysis that reflects a comprehensive list of available technologies. It is not necessary to list all permutations of available control levels that exist for a given technology; the list is complete if it includes the maximum level of control that each technology is capable of achieving.<sup>5</sup>

Attachment H-6 to Appendix H of the State’s regional haze SIP submittal summarizes the State’s assessment of the available strategies evaluated at each facility for BART, including many of the control options that the Commenter believes were ignored by ADEM; assesses the five statutory BART factors, including ADEM’s estimates of the costs of control sufficient to identify and evaluate the cost methodology employed; and describes ADEM’s basis for accepting or rejecting each measure as BART. For example, ADEM notes in Appendix H that Solutia has already installed a rotating opposed fired air combustion control system to reduce NOx formation from Boiler No. 7. ADEM identified SNCR and SCR as available post-combustion control options for this unit and noted that modeling for all of the NOx control options evaluated indicated relatively small to no reduction in visibility impacts, even with the maximum additional NOx control. In considering the five BART statutory factors for this unit, ADEM relied most heavily on the lack of visibility improvement at any federal Class I areas as the basis for its BART determination. Modeling lesser options would not have changed this result. Similar analyses and similar results were attained for all the BART-subject units at this

---

<sup>5</sup> EPA’s BART Guidelines at 70 FR 39164.

facility and at International Paper. EPA has reviewed ADEM's analyses and concluded they were conducted in a manner that is consistent with EPA's BART Guidelines and reflect a reasonable application of EPA's guidance to these sources. Emissions limits for these operations are contained in the State's title V permits for these facilities.

**Comment 5:** The Commenter disagrees with ADEM's methodology for identifying pollutants and sources subject to a reasonable progress analysis. The concerns identified by the Commenter include an "incomplete identification of emissions units likely to have the largest impacts on visibility" at federal Class I areas; improper reliance on CAIR to exempt out-of-state EGUs from conducting reasonable progress analyses; and a failure to identify and consider all proposed major new sources or major modifications to sources within and outside of the State.

Regarding in-state sources, the Commenter notes that ADEM's SO<sub>2</sub> area of influence (AOI) methodology captured only 55 percent of the total point source SO<sub>2</sub> contribution to visibility impairment in Sipsey and only 61-73 percent of the total contribution at federal Class I areas in neighboring states. The Commenter believes that, due to cumulative impacts, the reasonable progress analysis should have encompassed a greater number of units with SO<sub>2</sub> emissions that impact the State's Class I area and that Alabama's LTS should have further considered reducing NO<sub>x</sub> and ammonia emissions.

For the out-of-state CAIR EGUs that impact Alabama's Class I area, the Commenter believes that ADEM must conduct reasonable progress control analyses in order to determine

which emissions control measures would be needed at these EGUs to make reasonable progress toward improving visibility at Sipsey and reiterates statements made in its aforementioned February 28, 2012, comment letter regarding EPA's December 30, 2011, proposed rule.

Regarding proposed major new sources or major modifications new sources, the Commenter states that there is no evidence that Alabama's regional haze SIP submittal complies with the requirement in 40 CFR 51.306(d) that the LTS provides for review of the impacts from any new major stationary source or major modifications on visibility in any mandatory Class I area in accordance with 40 CFR 51.307, 51.166, 51.160 and any binding guidance insofar as these provisions pertain to protection of visibility. According to the Commenter, ADEM should have identified these sources and any increases in emissions resulting from installation and operation of new pollution controls (e.g., increased ammonia emissions from new SCRs and SNCRs) and considered them in a cumulative impact analysis for Sipsey.

**Response 5:** Concerning the State's AOI methodology for the identification of emission units for reasonable progress evaluation, as noted in EPA's Reasonable Progress Guidance<sup>6</sup> and discussed further in EPA's February 28, 2012, proposal action on the Alabama regional haze SIP submittal (77 FR 11949), the RHR gives states wide latitude to determine additional control requirements, and there are many ways to approach identifying additional reasonable measures as long as they consider the four statutory factors. Further, states have considerable flexibility in how to take these factors into consideration. EPA's Reasonable Progress Guidance recognizes

---

<sup>6</sup> *Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program*, July 1, 2007, memorandum from William L. Wehrum, Acting Assistant Administrator for Air and Radiation, to EPA Regional Administrators, EPA Regions 1–10 ("EPA's Reasonable Progress Guidance"), page 4-2.

that there are numerous ways to approach development of the LTS and to focus on those source categories that may have the greatest impact on visibility at Class 1 areas, considering the statutory factors at a minimum.<sup>7</sup> Significant control programs are being implemented nationally and across the southeast during the first implementation period, as described in chapter 7 of Alabama's regional haze SIP submittal. The impact of programs such as CAIR, CSAPR, and the NOx SIP Call are being realized regionally, and the implementation of these programs in Alabama will significantly reduce emissions and improve visibility at Sipsey and at federal Class I areas outside Alabama.

Regarding its reliance on CAIR, the State took into account emissions reductions expected from CAIR to determine the 2018 reasonable progress goals (RPGs) for its Class I areas. This approach was fully consistent with EPA guidance at the time of SIP development. ADEM determined that no additional SO<sub>2</sub> controls beyond CAIR are reasonable for its EGUs in the first implementation period based on the State's review of the statutory factors (i.e., the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources) as evaluated by EPA for CAIR, and that CAIR is expected to reduce EGU SO<sub>2</sub> emissions by approximately 70 percent.

---

<sup>7</sup> EPA's Reasonable Progress Guidance, pages 4-1, 4-2.

Regarding the consideration of new sources and major modifications, the Alabama regional haze SIP revisions subject to this rulemaking address the regional haze requirements of 40 CFR 51.308 whereas the regulation cited by the Commenter, 40 CFR 51.306(d), 40 CFR 51.307, 51.166, and 51.160, are specific to the new source review (NSR) requirements for RAVI. Furthermore, as identified in footnote 19 of EPA's the February 28, 2012, proposed rulemaking 77 FR 11955, Alabama has already addressed the NSR requirements for visibility (40 CFR 51.307) and RAVI LTS (40 CFR 51.306) in its SIP. New sources and major modifications are also explicitly part of the emissions inventory used to project future conditions.

The projected inventories for 2009 and 2018 account for post-2002 emissions reductions from promulgated and proposed federal, state, local, and site-specific control programs and account for expected growth in emissions from new sources. For EGUs, the Integrated Planning Model was run to estimate emissions of the proposed and existing units in 2009 and 2018. These results were adjusted based on state and local air agencies' knowledge of planned emissions controls at specific EGUs. For non-EGUs, VISTAS used recently updated growth and control data consistent with the data used in EPA's CAIR analyses supplemented by state and local air agencies' data and updated forecasts from the U.S. Department of Energy. These updates are documented in the MACTEC emissions inventory report "Documentation of the 2002 Base Year and 2009 and 2018 Projection Year Emission Inventories for VISTAS" dated February 2007 (Appendix D of Alabama's regional haze SIP submittal). The technical information provided in the record demonstrates that the emissions inventory in the SIP adequately reflects projection 2018 conditions and that the LTS meets the requirements of the RHR and is approvable. EPA finds that these inventories provide a reasonable assessment of future emissions from North

Carolina sources.

**Comment 6:** The Commenter believes that ADEM improperly exempted several sources from a reasonable progress evaluation for SO<sub>2</sub> even though the State determined that these sources were above its minimum threshold for performing such an analysis and reiterates statements made in its aforementioned February 28, 2012, comment letters regarding EPA's December 30, 2011, proposed rule. The Commenter disagrees with ADEM's decision to exempt EGUs subject to CAIR from conducting reasonable progress analyses. As for non-EGUs subject to BART, the Commenter accepts ADEM's conclusion that the BART determinations satisfy requirements under the RHR's reasonable progress provisions for International Paper and Solutia; however, the Commenter disagrees with Alabama's BART determinations for these units.

**Response 6:** See the response to Comment 5 regarding the State's determination that no additional SO<sub>2</sub> controls beyond CAIR are reasonable for its EGUs in the first implementation period. Regarding the BART determinations for non-EGUs, EPA has reviewed the ADEM analyses and concluded they were conducted in a manner that is consistent with EPA's BART Guidelines and reflect a reasonable application of EPA's guidance to these sources (see response to Comment 4).

**Comment 7:** According to the Commenter, the cost effectiveness analysis used to make the reasonable progress determination for the Cargill, Inc. facility (Cargill) was flawed, and therefore, EPA cannot approve Alabama's proposed SIP. The Commenter contends that the inputs used for the efficiency of the pollution controls analyzed and the costs attributed to those controls were improper.

**Response 7:** Cargill shut down operations of this facility in 2009 and sold the site to DeBruce Grain in August 2010. DeBruce Grain plans to operate a grain handling, shipping, and storage facility and is no longer expected to be a main contributor to regional haze.

**Comment 8:** The Commenter states that ADEM improperly estimated emissions reductions for 2018 and that Alabama's projection of future visibility conditions for 2018 is based on "uncertain federal and state pollution control projects, including, in large part, on the emissions reductions anticipated from CAIR." The Commenter also believes that anticipated emissions reductions resulting from the other control programs considered by Alabama (e.g., Industrial Boiler MACT, the Atlanta/Birmingham/Northern Kentucky 1997 8-hour ozone nonattainment area SIP) are just as uncertain as those resulting under CAIR and the Transport Rule, and that Alabama "need[s] to base its LTS on concrete, definite SO<sub>2</sub> emissions reductions." Because of the alleged uncertainty of the actual reductions predicted under the pollution control programs identified by the Commenter, the Commenter believes that additional SO<sub>2</sub> reductions are necessary at this time to ensure that Alabama's RPGs are met. The Commenter requests that, at a minimum, EPA should ensure that ADEM follows through on its commitment to re-evaluate its

ability to meet its RPGs in the five-year progress review. While the Commenter acknowledges that the RPGs exceed the uniform rate of progress and are projected to be met, it contends that the State should “go beyond the URP [uniform rate of progress] analysis in establishing RPGs and do everything it can to ensure visibility impacts to affected Class I areas are reduced.”

**Response 8:** The technical information provided in the record demonstrates that the emissions inventory in the SIP adequately reflects projected 2018 conditions and should be approved. Alabama’s 2018 projections are based on the State’s technical analysis of the anticipated emissions rates and level of activity for EGUs, other point sources, nonpoint sources, on-road sources, and off-road sources based on their emissions in the 2002 base year, considering growth and additional emissions controls to be in place and federally enforceable by 2018. The emissions inventory used in the regional haze technical analyses that was developed by VISTAS with assistance from Alabama projected 2002 emissions (the latest region-wide inventory available at the time the submittal was being developed) and applied reductions expected from federal and state regulations affecting the emissions of volatile organic compounds and the visibility impairing pollutants NO<sub>x</sub>, PM, and SO<sub>2</sub>.

To minimize the differences between the 2018 projected emissions used in the Alabama regional haze submittal and what actually occurs in 2018, the RHR requires that the five-year review address any expected significant differences due to changed circumstances from the initial 2018 projected emissions, provide updated expectations regarding emissions for the

implementation period, and evaluate the impact of these differences on RPGs. It is expected that individual projections within a statewide inventory will vary from actual emissions over a 16-year period. For example, some facilities shut down whereas others expand operations. Furthermore, economic projections and population changes used to estimate growth often differ from actual events; new rules are modified, changing their expected effectiveness; and methodologies to estimate emissions improve, modifying emissions estimates. The five-year review is a mechanism to assure that these expected differences from projected emissions are considered and their impact on the 2018 RPGs is evaluated. In the regional haze program, uncertainties associated with modeled emissions projections into the future are addressed through the requirement under the RHR to submit periodic progress reports in the form of a SIP revision. Specifically, 40 CFR 51.308(g) requires each state to submit a report every five years evaluating progress toward the RPGs for each mandatory Class I area located in the state and for each Class I area outside the state that may be affected by emissions from the state. Since this five-year progress re-evaluation is a mandatory requirement, it is unnecessary for EPA to take additional measures to “ensure” that the State meets its reporting obligation. In the specific instances of uncertainty of future reductions cited by the Commenter, the State’s analysis of projected emissions and its reliance on these projections to establish its RPGs meets the requirements of the regional haze regulations and EPA guidance.

Regarding the need to go beyond the URP analysis when establishing RPGs, EPA affirmed in the RHR that the URP is not a “presumptive target;” rather, it is an analytical requirement for setting RPGs. *See* 64 FR 35731. In determining RPGs for Alabama’s Class I area, the State identified sources through its AOI methodology for reasonable progress control

evaluation and described those evaluations in its SIP. Thus, the State went beyond the URP to identify and evaluate sources for potential control under reasonable progress in accordance with EPA regulations and guidance.

**Comment 9:** The Commenter contends that Alabama's regional haze SIP must require revisions to address RAVI within three years of a Federal Land Manager (FLM) certifying visibility impairment and that the State's commitment to address RAVI, should a FLM certify visibility impairment, is not enough.

**Response 9:** The SIP revisions do not address RAVI requirements since this was the subject of previous rulemakings. EPA's visibility regulations direct states to coordinate their RAVI LTS provisions with those for regional haze and the RAVI portion of a SIP must address any integral vistas identified by the FLMs. However, as stated in the February 28, 2012, proposed rulemaking, the FLMs have not identified any integral vistas in Alabama, the Class I area in Alabama is not experiencing RAVI, and no Alabama sources are affected by the RAVI provisions. Thus, the July 15, 2008, Alabama regional haze SIP revision did not explicitly address the coordination of the regional haze with the RAVI LTS although Alabama made a commitment to address RAVI should the FLM certify visibility impairment from an individual source. EPA finds that Alabama's regional haze SIP appropriately supplements and augments the State's RAVI visibility provisions to address regional haze by updating the LTS provisions as

Alabama has done. The commitments in Alabama's SIP are consistent with the regulatory requirements for this provision.

**Comment 10a:** The Commenter claims that Alabama's regional haze SIP does not explain how monitoring data and other information is used to determine the contribution of emissions from within the State to regional haze visibility impairment at Class I areas within and outside Alabama. Therefore, the Commenter believes that EPA must disapprove Alabama's regional haze SIP.

**Comment 10b:** The Commenter states that the SIP must clearly state the method by which the State intends to report visibility monitoring to the EPA. Additionally, the Commenter states that if Alabama plans to rely on the referenced Visibility Information Exchange Web System (VIEWS) web site for reporting, the SIP must clearly state that Alabama intends to use the Web site as its way of reporting visibility monitoring data. "If Alabama intends to use another method of reporting visibility, the proposal needs to explain that. If Alabama intends to use VIEWS for reporting, it is not sufficient for Alabama to 'encourage' VISTAS to maintain the web site." The Commenter also states that the Alabama SIP needs to have an enforceable mechanism to transmit the Interagency Monitoring of Protected Visual Environments (IMPROVE) data to EPA as well as an enforceable mechanism to ensure that the IMPROVE data is continually gathered. The "SIP must include an enforceable requirement that the data is gathered by Alabama unless it is gathered by other entities such as VISTAS and the National Park Service." The Commenter concludes by stating that "[b]ecause such an enforceable requirement is missing, EPA must

disapprove the SIP submittal in this regard.”

**Responses 10a, 10b:** As noted by the Commenter, the primary monitoring network for regional haze in Alabama is the IMPROVE network, and there is currently one IMPROVE site in Alabama, within the Bankhead National Forest and managed by the FLM, which serves as the monitoring site for Sipsey. IMPROVE monitoring data from 2000–2004 serves as the baseline for the regional haze program, and is relied upon in the Alabama regional haze submittal and in providing annual visibility data to EPA. Monitoring data is different from emissions data or analyses conducted to attribute contribution. These analyses are part of the ten-year implementation period updates conducted by the states.

In its SIP revision, Alabama states its intention to rely on the IMPROVE network for complying with the regional haze monitoring requirement in EPA’s RHR for the current and future regional haze implementation periods. Data produced by the IMPROVE monitoring network will be used nearly continuously for preparing the five-year progress reports and the 10-year SIP revisions, each of which relies on analysis of the preceding five years of data. The VIEWS web site has been maintained by VISTAS and the other regional planning organizations (RPOs) to provide ready access to the IMPROVE data and data analysis tools. Alabama is encouraging VISTAS and the other RPOs to maintain VIEWS or a similar data management system to facilitate analysis of the IMPROVE data. Alabama cannot legally bind federal and state legislatures to continue to fund the monitoring program for regional haze. Alabama’s SIP

adequately addresses this provision and explains how monitoring data and other information has been and will be used to determine the contribution of emissions from within the State to regional haze visibility impairment at federal Class I areas.

**Comment 11:** The Commenter believes that EPA should fully approve the State's implementation plan as it applies to regional haze since it is likely that either CAIR or the Transport Rule will be in effect in the future.

**Response 11:** Today, EPA is finalizing action on a limited approval of Alabama's regional haze SIP that results in an approval of the entire regional haze submission and all of its elements, preserving the visibility benefits offered by the SIP. EPA has the authority to issue a limited approval and believes that it is appropriate and necessary to promulgate a limited approval of Alabama's regional haze SIP. On December 30, 2011, EPA proposed a limited disapproval for Alabama's regional haze SIP and explained that EPA cannot fully approve regional haze SIP revisions that rely on CAIR for emissions reduction measures for the reasons discussed in that action. Comments on the disapproval are therefore beyond the scope of this rulemaking. EPA finalized the limited disapproval of Alabama's regional haze SIP in a final action published June 7, 2012 (77 FR 33642).

**Comment 12:** The Commenter expressed concern with EPA's proposed approach of adopting FIPs at the time of disapproval to replace reliance on CAIR in the regional haze SIPs with reliance on the Transport Rule. The Commenter believes that states should be given every

opportunity provided by the Act to make revisions to correct SIP deficiencies before EPA acts by imposing a FIP.

**Response 12:** As discussed in the response to Comment 11, today's action addresses the limited approval, and EPA finalized a limited disapproval in a separate action published on June 7, 2012. In that same action, EPA did not finalize a FIP for Alabama. EPA's response to comments on the final disapproval can be found in Docket ID No. EPA-HQ-OAR-2011-0729 at [www.regulations.gov](http://www.regulations.gov).

### **III. What is the Effect of This Final Action?**

Under CAA sections 301(a) and 110(k)(6) and EPA's long-standing guidance, a limited approval results in approval of the entire SIP revision, even of those parts that are deficient and prevent EPA from granting a full approval of the SIP revision. Today, EPA is finalizing a limited approval of Alabama's July 15, 2008, regional haze SIP revision. This limited approval results in approval of Alabama's entire regional haze submission and all its elements. EPA is taking this approach because Alabama's SIP will be stronger and more protective of the environment with the implementation of those measures by the State and having federal approval and enforceability than it would without those measures being included in its SIP.

#### **IV. Final Action**

EPA is finalizing a limited approval of a revision to the Alabama SIP submitted by the State of Alabama on July 15, 2008, as meeting some of the applicable regional haze requirements as set forth in sections 169A and 169B of the CAA and in 40 CFR 51.300–308. Also in this action, EPA is rescinding the federal regulations in 40 CFR 52.61 that were approved into the Alabama SIP on November 24, 1987, and approving the provisions in Alabama’s July 15, 2008, SIP submittal to meet the monitoring and LTS requirements for RAVI at 40 CFR 51.306.

#### **V. Statutory and Executive Order Reviews**

##### **A. Executive Order 12866, Regulatory Planning and Review**

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled “Regulatory Planning and Review.”

##### **B. Paperwork Reduction Act**

Under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., OMB must approve all “collections of information” by EPA. The Act defines “collection of information” as a requirement for answers to “...identical reporting or recordkeeping requirements imposed on ten or more persons...”. 44 U.S.C. 3502(3)(A). The Paperwork Reduction Act does not apply to this action.

### **C. Regulatory Flexibility Act (RFA)**

The RFA generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

This rule will not have a significant impact on a substantial number of small entities because SIP approvals under section 110 and subchapter I, part D of the CAA do not create any new requirements but simply approve requirements that the State is already imposing.

Therefore, because the federal SIP approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities.

Moreover, due to the nature of the federal-state relationship under the CAA, preparation of flexibility analysis would constitute federal inquiry into the economic reasonableness of state action. The CAA forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co., v. EPA*, 427 U.S. 246, 255-66 (1976); 42 U.S.C. 7410(a)(2).

### **D. Unfunded Mandates Reform Act (UMRA)**

Under sections 202 of the UMRA of 1995 (“Unfunded Mandates Act”), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a federal mandate that may result in estimated costs to state, local, or

tribal governments in the aggregate; or to the private sector, of \$100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that today's action does not include a federal mandate that may result in estimated costs of \$100 million or more to either state, local, or tribal governments in the aggregate, or to the private sector. This federal action approves pre-existing requirements under state or local law, and imposes no new requirements. Accordingly, no additional costs to state, local, or tribal governments, or to the private sector, result from this action.

#### **E. Executive Order 13132, Federalism**

*Federalism* (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications.” “Policies that have federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.” Under Executive Order 13132, EPA may not issue a regulation that has Federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the federal government provides the funds necessary to pay

the direct compliance costs incurred by state and local governments, or EPA consults with state and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has Federalism implications and that preempts state law unless the Agency consults with state and local officials early in the process of developing the proposed regulation.

This rule will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the CAA. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

**F. Executive Order 13175, Coordination with Indian Tribal Governments**

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” This rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments. Thus, Executive Order 13175 does not apply to this rule.

**G. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks**

*Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be “economically significant” as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This rule is not subject to Executive Order 13045 because it does not involve decisions intended to mitigate environmental health or safety risks.

**H. Executive Order 13211, Actions that Significantly Affect Energy Supply, Distribution, or Use**

This rule is not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

**I. National Technology Transfer and Advancement Act (NTTAA)**

Section 12 of the NTTAA of 1995 requires federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use “voluntary consensus standards” (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise

impractical.

EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

#### **J. Congressional Review Act**

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

#### **K. Petitions for Judicial Review**

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [insert 60 days from the date of publication in the Federal Register]. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial

review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. *See* section 307(b)(2).

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

**AUTHORITY:** 42 U.S.C. 7401 *et seq.*

Dated: June 14, 2012

A. Stanley Meiburg

Acting Regional Administrator,

Region 4.

40 CFR part 52 is amended as follows:

**PART 52--[AMENDED]**

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

**Subpart B--Alabama**

2. Section 52.50 (e) is amended by adding a new entry for “Regional Haze Plan” at the end of the table to read as follows:

**§52.50 Identification of plan.**

\* \* \* \* \*

(e) \* \* \*

**EPA Approved Alabama Non-Regulatory Provisions**

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date/effective date	EPA approval date	Explanation
**	**	*	*	*
Regional Haze Plan	Statewide	7/15/2008	[Insert date of publication in <u>Federal Register</u> ] [Insert citation of publication]	

3. Section 52.61 is amended by removing and reserving paragraph (a) to read as follows:

**§52.61 Visibility protection.**

(a) [Reserved]

\*\*\*\*\*

[FR Doc. 2012-15475 Filed 06/27/2012 at 8:45 am; Publication Date: 06/28/2012]